Early Warning - Early Action
Enabling climate-smart disaster risk management

DRAFT PROPOSAL ELEMENTS, FOR CONSULTATION ONLY

This note was developed by the Red Cross/Red Crescent Climate Centre and the International Research Institute for Climate and Society. It is based on 10 years of experience integrating climate risk management into the work of the Red Cross and Red Crescent, including through the Preparedness for Climate Change programme (involving 65 National Red Cross and Red Crescent Societies and the IFRC) and the IFRC-IRI Partnership to Save Lives.

It presents a vision on how to achieve more climate-smart disaster risk management. Elements of this proposal will need to be incorporated into more specific project proposals, tailored to specific circumstances, including regional delivery contexts. This note is meant as a discussion starter with IFRC, PNSs and other key stakeholders, to jointly define next steps, including specific implementation modalities.

For further information, please contact Maarten van Aalst (vanaalst@climatecentre.org, +31 6 150 86 199)

1. Background

The Red Cross and Red Crescent movement (RCRC) is the world’s largest humanitarian organization. The RCRC mobilizes approximately $1.5 billion\(^1\) a year in disaster related actions; the RCRC national societies mobilize a network of tens of millions of volunteers and the International Federation of Red Cross and Red Crescent Societies (IFRC) manages a Disaster Management Information System (DMIS) that reaches into every country. The RCRC maintains deep linkages to government, civil society, the UN system and the private sector, and is one of the most recognized, known and respected global organizations. The RCRC is at the forefront of the movement to establish effective early warning/early action; from global scale scientific collaborations to village level action; and from hours to decades ahead of the occurrence of potential disasters\(^2\). The Red Cross Red Crescent Climate Centre (RCCC) is the global reference centre of the RCRC on climate-related issues.

The International Research Institute for Climate and Society (IRI) is a member of the Earth Institute and Columbia University and a partner of the IFRC since 2007. Together they have developed innovations in science, decision support tools, and new practices that have helped save many lives and livelihoods. The IRI has relied on global collaborations to develop the knowledge needed by the IFRC. IRI partners included universities, Regional Climate Centers, national meteorological and hydrological services, WHO collaborating institutes and CGIAR centers. Together the IFRC and IRI have been advocates and implementers of climate services that meet the needs of the most vulnerable – from current operations to help communities survive extreme events to longer-term planning in the face of a changing climate.

---

\(^1\) Humanitarian Emergency Response Review, DFID March 2011
\(^2\) See also World Disasters Report 2009, particularly chapter 3 “Bridging Timescales”
climate. Within this collaboration a set of minimum standards are currently being developed that establish the basic core competencies that need to be in place to mobilize climate early warning/early action.

This draft proposal aims to contribute to the implementation of the Cancun Adaptation Framework (2010), notably paragraph 14(e)\(^3\), The Hyogo Framework for Action (2005)\(^4\) and the Global Framework for Climate Services (GFCS, 2009)\(^5\).

2. The Challenge and the Way Forward

Throughout the world regional centers of climate expertise produce high-quality scientifically robust information. However, this information is rarely tailored to the needs of the humanitarian community, and it is distant from the sorts of decisions that humanitarian actors need to take. The challenge is to ensure that the vulnerable have the information they need to take action at the household, village or neighborhood level - and that there be a range of effective actions to take. Actions span activities from long-term adaptation and disaster risk reduction to rapid response.

To break through this challenge requires a system that bridges the gaps in knowledge, communication, coordination, policy and information from the individual on the ground to the information and actions that will help make him/her more resilient. This requires mobilizing more than the Red Cross/Red Crescent and the IRI. These partner institutions will work to ensure that other humanitarian actors (National Governments, UN, NGOs) and other science and knowledge centers participate, support and take ownership of the effort.

The proposed four-year effort aims to achieve the critical breakthroughs - enabling a robust shift to Early Warning/Early Action in the humanitarian community. Major existing scientific and humanitarian infrastructure and investments will be leveraged to support this effort.

3. The Elements – what we need to achieve the breakthroughs

A) Regional to Local Capacity

In great part, the challenge must be solved at a sub-regional scale (e.g. East Africa, the Caribbean, Southeast Asia). This is because the IFRC and the humanitarian community generally organize resources, capacity building, preparedness and response at this scale. Climate and weather systems operate and can best be understood at sub-regional scales also. Activities and institutional capacity that are fostered at the sub-regional scale will then

---

\(^3\) Enhancing climate change related disaster risk reduction strategies, taking into consideration the Hyogo Framework for Action, where appropriate, early warning systems, risk assessment and management (…).

\(^4\) The five priorities of the HFA are:
1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.
2. Identify, assess and monitor disaster risks and enhance early warning.
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
4. Reduce the underlying risk factors.
5. Strengthen disaster preparedness for effective response at all levels.

\(^5\) The main objective of the GFCS is to: "Enable better management of the risks of climate variability and change and adaptation to climate change at all levels, through development and incorporation of science-based climate information and prediction into planning, policy and practice."
be brought to action through collaboration with national scale actors such as the National Red Cross and Red Crescent Societies, governments, NGOs and UN offices, supporting subnational effort through Red Cross/Red Crescent districts and branches in partnership with local government, NGOs and others.

This process will need to evolve along three coordinated fronts -

**A1. Climate Helpdesk**

Based at the regional office of the IFRC, or hosted by a NS who offers to take this regional responsibility, the helpdesk will act as a focal point for knowledge generation, exchange and action. This support will enable more climate-informed decision-making so that early action can be taken, and will help to analyze results of early action. Eventually, this will support a crucial link in the chain of accountability: when the right climate information is available to the right people at the right time, and there is more clarity on early actions that can be taken on that basis, early action will be no longer just an option that might sometimes be taken by some individuals somewhere in the system who happen to be proactive, but the regular way of working.

- Support appropriate use of relevant climate information at regional and national levels
- Facilitate collaborations between information providers and RCRC
- Facilitate inter-agency collaborations
- Promote NS to NS interactions
- Capture learning
- Train Regional and NS staff
- Advocate for improved decision making on Early Warning/Early Action
- Generate research and science questions
- Analysis of forecast thresholds for humanitarian action

**A2. National to Local Capacity**

The RCRC will develop and field test locally designed approaches to:

- Work with National Meteorological and Hydrological Services, in order to:
  - Establish mechanism to enable early warning/early action tools and alerts.
  - Promote the humanitarian community as a principal service client.
- Communicate, advise and respond to RCRC district and branch actors.
- Coordinate with Regional Humanitarian Helpdesks.
- Monitor and Evaluate implementation.

**A3. Regional and National Climate Information Providers –**

Regional climate centers will be supported and worked with to development of climate services tailored to humanitarian needs.

**B) Global Facilitation**

The IFRC’s secretariat, the Red Cross/Red Crescent Climate Centre, the IRI, and other relevant organizations will facilitate climate early warning/early action. They will provide technical backstopping, ensure that capacity is strengthened where it is currently relatively weak, that knowledge and lessons are transferred, and there is quality control on the regional and national science applications.
Integrated overarching activities will include:

- Development of climate services, delivered as part of global Disaster Management Information System, and supported by
  - Support to Regional Helpdesks
  - Technical backstopping and quality control
- Peer to peer EW/EA learning across regions
- Development of training materials, including e-learning
  - Games and participatory learning
  - Course on Climate and Humanitarian Action
- Documentation
  - Real-Time Early Warning Early Action deployment documentation.
  - Lessons Learned
- Research and Innovation – such as:
  - Decadal climate research and systems to develop appropriate early action
  - Forecasting of Extremes within seasons and fine-tuning appropriate early actions with a focus on community level
  - Historical climate construction and analysis Forecast Verification
  - Thresholds Analysis for early action
- Monitoring and Evaluation
  - Development of new monitoring and evaluation methods for EW/EA and community effectiveness
- Humanitarian Donor Dialogues
  - Enhancing a transformation of humanitarian financial instruments to foster early action based on early warnings (at multiple timescales).
  - Outreach and communications

4. Indicative Budget Structure

The table below provides an indicative budget for the ideas above, in this case for 3 regions with in-depth work in 3 countries per region (in thousands CHF)

<table>
<thead>
<tr>
<th>1. Regional to local capacity</th>
<th>2. Global Facilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Climate helpdesks</strong> (300K per region, 3 regions)</td>
<td>Development of climate services to global Disaster Management Information System</td>
</tr>
<tr>
<td><strong>Regional Climate Information Providers</strong> (150 K per region, 3 regions)</td>
<td>Development of Training materials, including e-learning</td>
</tr>
<tr>
<td>1.2 National to Local Capacity</td>
<td>Course on Climate and Humanitarian Action</td>
</tr>
<tr>
<td>National Climate Risk Management Capacity (100 K per country, 3 countries per region, 3 regions)</td>
<td>Documentation</td>
</tr>
<tr>
<td>1.3 Support to Regional Climate Centres</td>
<td>Research and Innovation</td>
</tr>
<tr>
<td>2. Global Facilitation</td>
<td>Integrated climate information tool development</td>
</tr>
<tr>
<td>Humanitarian Donor Dialogues</td>
<td>Monitoring and Evaluation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. year</th>
<th>4 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate helpdesks</td>
<td>900</td>
</tr>
<tr>
<td>Regional Climate Information Providers</td>
<td>450</td>
</tr>
<tr>
<td>National Climate Risk Management Capacity</td>
<td>900</td>
</tr>
<tr>
<td>Support to Regional Climate Centres</td>
<td>100</td>
</tr>
<tr>
<td>Development of climate services to global Disaster Management Information System</td>
<td>50</td>
</tr>
<tr>
<td>Development of Training materials, including e-learning</td>
<td>200</td>
</tr>
<tr>
<td>Course on Climate and Humanitarian Action</td>
<td>120</td>
</tr>
<tr>
<td>Documentation</td>
<td>50</td>
</tr>
<tr>
<td>Research and Innovation</td>
<td>200</td>
</tr>
<tr>
<td>Integrated climate information tool development</td>
<td>50</td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>50</td>
</tr>
<tr>
<td>Humanitarian Donor Dialogues</td>
<td>30</td>
</tr>
</tbody>
</table>